Name:

p1029: Box multiplication of linear binomials (v20)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine like terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(7x + 8)$ and $(4x + 3)$.

*	7x	8
4x	$28x^2$	32x
3	21x	24

ANSWER: $28x^2 + 53x + 24$

Question 2

Use the box method to multiply $(-6x + 2)$ and $(-9x - 3)$.

*	− 6x	2
− 9x	54x^2	− 18x
− 3	18x	− 6

ANSWER: $54x^2 + 0x - 6$

Question 3

Use the box method to multiply $(2x - 9)$ and $(-7x - 5)$.

*	2x	− 9
− 7x	− 14x^2	63x
− 5	− 10x	45

ANSWER: $-14x^2 + 53x + 45$